CHARGE NUMBER: Various

PROGRAM TITLE: Flavor Development

PERIOD COVERED: May 1 - 31, 1973

PROJECT LEADER: H. L. Spielberg

DATE OF REPORT: June 11, 1973

I. FLAVOR PRODUCT DEVELOPMENT

Test marketing of a CF free Parliament with flavor compensation has been authorized. Materials for flavor 5367-6 have been ordered and will be transferred to the Manufacturing Department after they have been screened. CF replacement work on Multifilter and Marlboro Lights is continuing. 1

Work with reduced delivery cigarets, including 12 mg and 14 mg models is proceeding. Two of the three 14 mg Hi Burley models were below target delivery. These lower delivery models will be screened as 12 mg candidates and also be remade at the higher delivery level. A series of five blends with two different filter constructions are being prepared as 12 mg candidates.²

Several cigaret models in the menthol program are currently being evaluated. Marlboro Lights-type menthol models have been boothe tested against Salem and Kools. Richmond placement testing of this cigaret is scheduled. Preliminary manufacturing specification runs for Alpine 100 have been completed and specifications are being written. Two National POL mailout tests of modified Alpine vs. regular Alpine have been released and the HTI test is being analyzed. Preliminary manufacturing specifications of Marlboro 80 Menthol are being established. Models are also being prepared for consumer testing. Marlboro-type cigarets, with a low level of menthol have been prepared and preliminary testing are being conducted. Boothe testing of this model showed us obvious differences from the control.³

In the utilization studies, modified flavor systems have been developed for use on ESS based on the 15% prototypes previously evaluated. The flavor systems were developed for national testing of ESS at about 7%. Additional work is being conducted to develop flavor systems for ESS and ES that are more easily adaptable to current processing procedures. July 1973 type models are being prepared with cased and uncased ES as well as regular RKS, for extensive evaluation. Cylinder volumes for the three flavored ESS samples were found to be comparable with the unflavored ESS. Flavor development work on EBS as well as ESS has included the development and evaluation of reducing sugars, dap, ammonia, and some suspected flavor precursors such as sulfur-amino acids. Additional ammino acid, sugar combinations are being evaluated, alone and in combination with conventional flavors. Studies of SRT and SBS are continuing. Models of cigarets with flavored SRT at 5%, 10%, and 17 1/2% are being evaluated. National POL models using 22 1/2%

TBRCB are in cold storage awaiting an available panel. STBRT is being tested by HTI in cigaret models at 22 1/2%. Preliminary data show this model to be different from the control.

Flavor modified Parliament cigarets have been prepared and are being evaluated. HTI models of Parliament with filter modifications have been screened subjectively and found satisfactory for release.⁵

II. FLAVOR DEVELOPMENT ASSISTANCE

A series of flavors have been developed and applied to NBF products and LTF material. Cigarets using these flavored materials at the 50% level are being evaluated. RGL cigaret models are being screened and flavor evaluated on this product.

Turkish casing flavors were screened for use in Venezuela. Flavor 6218-52B was recommended for further evaluation.

Evaluations of cigaret models with modified sidestream are underway as well as the development of flavors for addition to the cigaret paper. Work on distinctive flavors and flavor fall out is also continuing.

III. REFERENCES

- 1. Notebook 6205, page 83. " 5367, page 6.
- 2. " 6205, pages 72, 84. " 5367, page 20.
- 3. " 6205, pages 70-71, 73-74, 76-77, 79, 81-82, 89. " 5367, page 16.
- 4. " 6277, pages 98-100.
 " 6321, pages 1-35.
 " 6295, pages 10, 12-13, 26, 27.

Memo L. L. Long to D. K. Keel, May 17, 1973. "Cylinder Volume of Flavor Treated ESS."

Notebook 6293, page 23.

- 5. " 6293, pages 27-28, 34, 40.
- 6. " 6293, pages 17, 21, 25, 29, 35, 36, 37.
- 7. " 6293, page 38.
- 8. " 6293, page 48.

. Spielberg